

Claim 2 (Amended)

A1  
The method of claim 15 wherein the glucagon-like peptide-1 is selected from (a) a peptide which comprises the amino acid sequence of glucagon-like peptide-1, and (b) a variant peptide comprising an amino acid sequence that differs from the sequence of glucagon-like peptide-1 by one or more substitutions, deletions or insertions wherein said variant binds to the glucagon-like peptide-1 amide receptor protein and has a corresponding biological affect on insulin secretion as GLP-1 (7-36) amide.

A2  
Claim 7 (Amended)

The method of claim 15, further comprising using an agent which enhances the half-life *in vivo* of the compound.

A3  
Claim 9 (Amended)

The method of claim 15 wherein the patient is simultaneously infused with a combined glucose/GLP-1 or its biologically active analogue.

Claim 10 (Amended)

The method of claim 15 wherein the patient is first infused with glucose and then later with GLP-1.

Claim 11 (Amended)

The method of claim 15 wherein the dose of GLP-1 is a bolus dose intravenously administered at from .05 nmol to 100 nmol.

Claim 12 (Amended)

The method of claim 15 wherein the dose is a bolus subcutaneous method at from 10 nmol to 1000 nmol.

Claim 13 (Amended)

The method of claim 15 wherein the patient is infused with a dose of GLP-1 or a biologically active analogue continuously infused by I.V. at from 0.1 pmol/kg/min to 10 pm/kg/min.

Claim 14 (Amended)

The method of claim 15 wherein dosing is continuous subcutaneous infusion at a dose of from 0.5 to 50 pm/kg/min.

Please add new claim 15 as follows:

Claim 15 (New)

A method of detecting impaired glucose tolerance of individuals by evaluation of  $\beta$ -cells secretory capacity, comprising:  
infusing the individual with glucose and a glucagon-like peptide-1 or its biologically active analogue expressed by a polynucleotide wherein said analogue binds to the glucagon-like peptide amide receptor protein and has a corresponding effect on insulin secretion as GLP-1 (7-36) amide; and thereafter  
measuring the insulin and C-peptide responses against standard responses of healthy subjects to determine if the individual has impaired  $\beta$ -cell function.